

Natural Security Version 3.1.5 for Mainframes

This section describes the enhancements provided with Natural Security Version 3.1.5 for Mainframes. It covers the following topics:

- Using Multiple Versions of Natural Security
 - User Maintenance Enhancements
 - Library Maintenance Enhancements
 - Utility Maintenance Enhancements
 - Administrator Services Enhancements
 - Other Enhancements
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Using Multiple Versions of Natural Security

As stated under the heading FSEC in the section General Installation Information in the Natural Installation Guide for Mainframes, the Natural Security system file FSEC can be shared by Natural Security Versions 2.3 and 3.1.

To ensure the consistency and completeness of the security data on a shared FSEC file, it is strongly recommended that you use only the highest Natural Security version for Natural Security maintenance.

If you use a shared FSEC file, it is not necessary to transfer any security data with SECULD/ SECLOAD.

User Maintenance Enhancements

Time Differential

You can now set the Time Differential in user profiles not only to a value of hours/minutes, but also to "*" (this has the same effect as the Natural profile parameter TD=AUTO, that is, the time differential will be computed by comparison of physical and logical machine times).

UNLOCK System Command

In user profiles of user types A, P and G, a new Additional Option "Unlock Objects" is provided. It allows you to control the use of the Natural system command UNLOCK, which is used in conjunction with the Natural Development Server. Possible settings of the Unlock Objects option are:

N	The user cannot use the UNLOCK command.
Y	The user can use the UNLOCK command, but only for his/her own programming objects (that is, objects locked under the same user ID).
F	The user can use the UNLOCK command for any locked programming object.

Library Maintenance Enhancements

Statement Restrictions

The following Natural statements can now also be allowed/disallowed: CALLDBPROC, CLOSE CONVERSATION, CREATE OBJECT, DEFINE CLASS, DEFINE WORK FILE, END-RESULT, OPEN CONVERSATION, SEND METHOD.

Natural RPC Restrictions

As part of the Natural RPC Restrictions in library profiles, a new server session option "Close all databases" is provided. It causes all databases which have been opened by remote subprograms contained in the library to be closed when a logon/logoff to/from the library is performed. Possible settings of this option are:

N	The databases are not closed when a logon/logoff to/from from the library is performed.
Y	The databases are closed when a logon to the library is performed.
F	The databases are closed when a logon to the library is performed, and when a logoff from the library is performed.

This option is only relevant if the option LOGONRQ=ON of the NTRPC macro in the Natural parameter module is set. If you wish to have one user-queue element per client session for each database accessed by the RPC server, it is recommended that you set LOGONRQ=ON and "Close all databases" to "Y" or "F".

Utility Maintenance Enhancements

Support of Old Protection Mechanism

As the old utility protection mechanism will no longer be supported as of one of the next releases, it is strongly recommended that the new utility protection mechanism by means of utility profiles (which was introduced with Version 2.3.1) be used in order to control the use of your Natural utilities.

SYSBPM Utility

The revised SYSBPM utility is fully supported by Natural Security. The revised functionality is reflected as far as possible in the existing utility profiles. It is not necessary to perform any conversion procedure in order to continue to use the existing utility profiles. The functions/commands which already existed in the old profiles are marked with an asterisk (*) on the SYSBPM utility profile screens; their protection is fully compatible with previous versions. However, in order to control the full range of SYSBPM functions/commands properly, you may have to adjust in your SYSBPM utility profiles the settings of the new functions/commands, that is, those which are *not* marked with an asterisk.

SYSMAIN Utility

An inconsistency in the SYSMAIN utility profiles has been removed: The options FNAT, FSEC and FDIC (which control the SYSMAIN functions SET FNAT, SET FSEC and SET FDIC respectively) can no longer be set in library-specific and user-library-specific utility profiles, but only in user-specific utility profiles.

SYSOBJH Utility

Previously, utility profiles for the SYSOBJH utility could only be defined in Natural Security on non-mainframe platforms. Now you can also define them in Natural Security on a mainframe computer.

SYSRPC Utility

Previously, utility profiles for the SYSRPC utility could only be defined in Natural Security on non-mainframe platforms. Now you can also define them in Natural Security on a mainframe computer.



Administrator Services Enhancements

General Options - Logging of Maintenance Functions

This option displays a window in which you can determine the object types whose modifications are to be logged. Until Version 3.1.4, "external objects" could only be marked collectively here, applying to all types of external objects; as of Version 3.1.5, you can activate/deactivate the logging for each type of external object individually.

Processing of Maintenance Log Records

- The Log File Maintenance batch-mode function "List Log Records" has been enhanced: In addition to listing the contents of the log file, it also displays for each record the components of the security profile concerned; moreover, the components that were modified will be marked. The batch report displayed corresponds to the information displayed by the function List Security Profile Maintenance Logs.
- Until Version 3.1.4, the object type "external objects" could only be selected collectively for the functions List Security Profile Maintenance Logs and Log File Maintenance. As of Version 3.1.5, you can select each type of external object individually.



Other Enhancements

Support of Natural Development Server

If the Natural Development Server is installed at your site, you can control the use of its object types - base applications and compound applications - in the new Application Maintenance section of Natural Security.

Interface Subprogram NSCXR

The interface subprogram NSCXR provides a new function which allows you to retrieve the ID of a user or library. You specify the name of the user or library, and the interface subprogram will return the corresponding user/library ID. An example program PGMXR014 is available in library SYSSEC.

PROFILE Command

The Natural system command PROFILE (which shows the user the conditions of use currently in effect) now also indicates whether, if the user is linked to the current library, the link is a special link or not. A special link ID will be indicated by an asterisk (*) next to the field Link ID.